

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
9 June 2005 (09.06.2005)

PCT

(10) International Publication Number
WO 2005/052589 A1

- (51) International Patent Classification⁷: **G01N 33/68**, 33/94, C12Q 1/32
- (21) International Application Number: PCT/IT2004/000658
- (22) International Filing Date:
26 November 2004 (26.11.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
RM2003A000556
28 November 2003 (28.11.2003) IT
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- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:**
- with international search report
 - before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHOD FOR QUANTITATIVE AND SEMI-QUANTITATIVE DETECTION OF L-PHENYLALANINE, L-TYROSINE, L-3, 4-DIHYDROXYPHENYLALANINE AND THEIR CORRESPONDING KETO-ACIDS

(57) Abstract: Method for quantitative and semi-quantitative determination of endogenous amino acids L-phenylalanine, L-tyrosine, L-3, 4-dihydroxyphenylalanine and their corresponding keto-acids, phenylpyruvic acid, 3-hydroxyphenylpyruvic acid and 3, 4-dihydroxyphenylpyruvic in biological fluids useful for diagnosis and monitoring of metabolic disorders of said amino acids or diseases involving said amino acids, comprising: a) reaction of phenylpyruvic acid, 3-hydroxyphenylpyruvic acid and 3, 4-dihydroxyphenylpyruvic, present as such in biological fluids or coming from the parent endogenous amino acids L-phenylalanine, L-tyrosine, L-3, 4-dihydroxyphenylalanine by deamination, with an organic salt of phenazine derivatives in the presence of at least one alkaline buffer to give colored charge transfer complexes; b) measurement of the absorbance values due to said charge transfer complexes in the wavelength range from 650 to 690 nm and quantification of the keto acids or amino acids concentrations in biological fluids.